

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
30 September 2004 (30.09.2004)

PCT

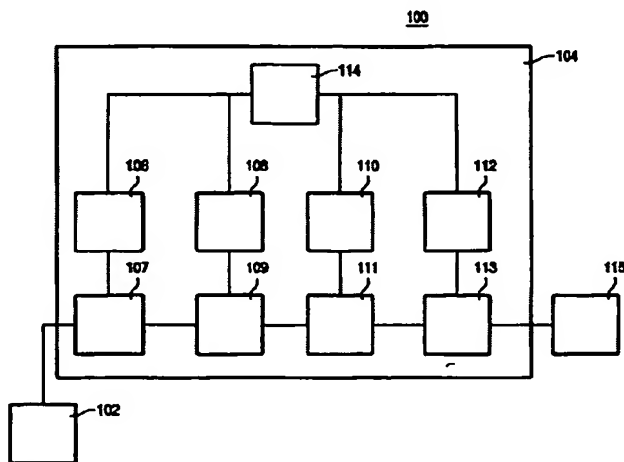
(10) International Publication Number
WO 2004/084220 A1

BEST AVAILABLE COPY

- (51) International Patent Classification⁷: **G11B 27/00**, (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (21) International Application Number: **PCT/IB2004/050273**
- (22) International Filing Date: **17 March 2004 (17.03.2004)**
- (25) Filing Language: **English**
- (26) Publication Language: **English**
- (30) Priority Data: **03100724.8** **20 March 2003 (20.03.2003)** **EP**
- (71) Applicant (for all designated States except US): **KONINKLIJKE PHILIPS ELECTRONICS N.V. [NL/NL];** Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **DE LANGE, Alphonsus, A., J. [NL/NL];** c/o Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL). **KANG, I-Chih [NL/NL];** c/o Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL).
- (74) Agent: **GROENENDAAL, Antonius, W., M.;** Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL).
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Declaration under Rule 4.17:**
— as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ,

[Continued on next page]

(54) Title: **CPI DATA FOR STEAM BUFFER CHANNELS**



(57) Abstract: A method and apparatus for performing trickplay operations on a multimedia playback device is disclosed. When a trickplay request is received during regular multimedia playback, the appropriate frame for processing at a last processing means is determined in response to the trickplay request. The appropriate frame from a buffer is retrieved using meta data stored in the buffer which identifies the frame and the retrieved frame is processed. Meanwhile, a second appropriate frame in the stored multimedia content is selected for processing by a first processing means in response to the trickplay request. The second appropriate frame and subsequently selected frames are then processed so that the second appropriate frame is available to the last processing means when the last processing means has completed processing of the retrieved frame.